



## **Sweatband using mono filament yarn for a Cap**

### **BACKGROUND OF THE INVENTION**

#### **1. Field of the Invention**

The present invention is related to a field of headwear and, more particularly, to the sweatband which has a special feature of keeping shape of crown in addition to appropriate elasticity.

#### **2. Description of the Prior Art**

A typical baseball-style cap generally includes a crown main body which is main portion having one or more of sheets of panels, a visor portion which is attached to the bottom of front of said crown portion, a sweatband which is attached to under circular portion of inside of said crown, and a size controller which is attached to under portion of rear side of said crown.

And a cap designed to control size without size controller has been developed. The cap has no size controller which has been attached to the bottom of front of said crown portion and said sweatband is extended up to rear side of said crown having its own elasticity due to the spandex yarn inside of it. Thus, when worn, the cap is naturally fit for wearer's head size by the elastic sweatband.

It has been found, however, that caps relying on spandex sweatbands for sizing exert pressure against the

wearer=s head which can become uncomfortable after the cap is worn for an extended period of time. In addition, when being taken off, as rear side of crown of cap may be drooped down, shape of the cap will not be kept.

It is, accordingly, needed an improvement to feature comfortable feeling without pressure even when worn for extended time in addition to having elasticity as well as keeping shape of rear side of crown of cap when being taken off.

#### **SUMMARY OF THE INVENTION**

In view of the foregoing, one object of the present invention is to provide headwear with a sweatband that does not exert undue pressure on the head when worn.

Another object of the present invention is to provide the sweatband, which keeps the shape of rear side of crown of cap.

The further object of the present invention is to provide the sweatband, which prevents sweat from running down due to its high sweat absorbing function.

In accordance with these and other objects, the sweatband according to the present invention is woven with mono filament yarn wrap-way and nylon multi filament yarn weft-way or with properly mixed polyester multi filament yarn without additional stitching portion. And the said sweatband does not contain polyurethane, is made to have elasticity as a whole because it has the effect to be stretched by the structure of

the textile, said multi filament yarn weft-way has the shape of a coil like spring and has the feature of having the shape of filing up grey yarn at regular interval. In addition, for using the said sweatband to headwear, the sweatband can be applied both to the headwear necessary to have the elasticity of sweatband without additional size controller and to the headwear unnecessary to have the elasticity as it has the size controller.

#### **BRIEF DESCRIPTION OF THE DRAWINGS**

Figure 1 is a right view of free size cap of pre-existing art of which rear side of crown is drooped down;

Figure 2 is a sectioned view of partial side of cap to which sweatband made of mono filament yarn of the present invention is attached;

Figure 3 is a textile structural view of sweatband of the present invention.

#### **DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT**

In describing preferred embodiments of the invention illustrated in the drawings, it is to be understood that these embodiments are given by way of illustration only. It is not intended that the invention be limited in its scope to the details of construction and arrangement of components set forth in the following description or illustrated in the drawings.

Also, in describing the preferred embodiments, specific terminology will be resorted to for the sake of clarity. It is to be understood that each specific term includes all technical equivalents which operate in a similar manner to accomplish a similar purpose.

The present invention is directed to a sweatband suitable for use with headwear of various types, but is described herein in connection with a baseball-style cap as shown in Figure 2. It is understood that the inventive sweatband may also be used with other types of headwear or even alone.

Figure 1 is a right view of free size cap of pre-existing art of which rear side of crown is drooped down. As shown in Figure 1, the free size cap of pre-existing art is composed of crown portion 1 which is made of several panels, visor portion 2 which is attached to front portion of lower portion of said crown, elastic sweatband which is attached the inner edge of the under portion of the crown, and the cap has no size controller. And the cap is naturally fit for wearer's head size having no need to control the size when worn as spandex included elastic sweatband is extended. But, as pointed above, the free size cap of pre-existing art may cause the problem of giving severe pressure feeling in head when worn for extended time and, when being taken off, as rear side of crown 3 of cap tends to be drooped down, original shape of the cap will not be kept causing a bad view.

Figure 2 is a sectioned view of partial side of cap to

which sweatband made of mono filament yarn of the present invention is attached. As shown in Figure 2, Like free size cap of pre-existing art, it is externally composed of crown portion 4 which is made of several panels, visor portion 5 which is attached to front portion of lower portion of said crown, sweatband 6 which is attached the inner edge of the under portion of the crown, and the cap has no size controller. The sweatband 6 is woven in a cylinder shape without an additional stitched portion, and may be single ply or two-ply according to the woven shape with the resulting effect that the sweatband is stretchable as a result of the structure of the textile. And said sweatband 6 is composed of mono filament yarn wrap-way and nylon multi filament yarn weft-way, of which material of yarn is nylon or polyester, has a width that is preferably within the range of 25mm to 70mm.

When being taken off, original shape of rear side of crown of cap is sustained without being drooped down, and the sweatband also provides excellent sweat absorbing capability and does not exert undue pressure such that the cap remains comfortable when worn for extended time periods. In addition, for using the said sweatband to headwear, the sweatband can be applied both to the headwear necessary to have the elasticity of sweatband without additional size controller and to the headwear unnecessary to have the elasticity as it has the size controller. The yarn used to produce the sweatband is processed by a high temperature method and piece dyeing method, and has the feature of twist at regular intervals.

Figure 3 is a textile structural view of sweatband of the present invention. As shown in Figure 3, Textile structure of sweatband according to the present invention is formed by mixing mono filament yarn wrap-way and nylon multi filament yarn weft-way, of which material of yarn is nylon or polyester. Said mono filament yarn wrap-way plays a role to keep the shape of rear side of crown of cap without being drooped down. According to the condition, sweatband, for which mono filament yarn and multi filament yarn are woven together in wrap-way and nylon multi filament yarn woven weft-way may be used.

The foregoing descriptions and drawings should be considered as illustrative only of the principles of the invention. The invention may be configured in a variety of shapes and sizes and is not limited by the dimensions of the preferred embodiment. Numerous applications of the present invention will readily occur to those skilled in the art. For example, the headband may be incorporated into hats, caps and visors of other styles, or may be used alone. Therefore, it is not desired to limit the invention to the specific examples disclosed or the exact construction and operation shown and described. Rather, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.